



# Comparative analysis of public operated airport terminal and concessioned airport terminal in Lagos, Nigeria

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This study compares the quality of airport services rendered in Murtala Muhammed International Airport (MMA1) which is the public operated airport and international terminal, and in Murtala Muhammed Airport (MMA2) which is the concessioned airport and domestic terminal. They are both located in Lagos state, Nigeria. It was revealed that respondents were satisfied with the quality of airport services provided in MMA2 than the quality of airport services provided in MMA1. Also, based on the service quality attributes, Gap analysis revealed that the respondents in MMA1 were satisfied with reliability attribute and tangibles attribute, while the respondents in MMA2 were satisfied with reliability attribute. It is important to note that the expectation of respondents in MMA2 is quite more than the expectation of respondents in MMA1. Airport passengers felt dissimilar (heterogeneous) about the airport services (products) offered; this heterogeneous perception can be traceable to be one of the unique characteristics of air transport service. Furthermore, the study revealed that there is a relationship between passengers' satisfaction and service quality. Hence, service quality leads to passengers' satisfaction. Finally, the fact that the quality of airport services provided in MMA2 is quite better than that of MMA1 can be traceable to the concession strategy of MMA2. It is therefore recommended that airport concessioning should be adopted in major airports in Nigeria as it is a very good strategy to enhancing quality of airport services, and efficiency of airport operations and management.

## INTRODUCTION

### Background to the Study

The demand for air transportation service is a derived demand such that it is rarely demanded to satisfy its own purpose. Apart from the fact that air transportation is a derived demand, there are other unique characteristics as established by John (2007) and scientifically proved by Adeniran *et al.* (2017) and Adeniran and Ben (2017). The unique characteristics of air transport are:

1. It is a product that cannot be stored or kept.
2. The product is usually personalized (consumers feel differently about the product). In view of this, Adeniran (2017) established the scientific proving of heterogeneous perception of airport passengers towards airport services.
3. There is no replacement for bad product.
4. It is difficult to test the product before use.
5. Delivery of product cannot be guaranteed because of unpredictable factors.
6. The product can be produced only in batches and not in individual units.

Passengers are the major customers of air transport business because

of their noticeable position, and they are the best to assessing the quality of airport services. Assessing the expectation of passengers regarding the quality of airport services as well as their perceptions of same services offered by the airport management is quite paramount for the purpose of enhancing airport efficiency, and promoting national growth through airport development and overall air transport management.

Passengers' satisfaction and service quality are linked to passengers' perceptions and passengers' expectations about airport services respectively. This implies that if the perception is higher than the expectations, the service will be viewed as outstanding. In literature, perception is viewed as the degree of customers' beliefs concerning the service received (Parasuraman *et al.*, 1985). Expectations, on the other hand, are conceptualized as consumers' desires or wants regarding the level of the anticipated service. According to Lewis (2010), one common approach in defining service quality is the degree to which a service meets the customers' needs.

Zeithaml and Bitner (2003) observe that service quality comprises attributes or dimensions that are critical to customers' evaluation of service quality. Therefore, a valuable method for measuring and improving service quality is to recognize what was considered vital when customers were appraising service attributes (Chelladurai and Chang, 2000) or the dimensions of service quality (Brady and Cronin, 2001). In airline, Jun, Yang, and Kim (2004) opined that service quality development and measurement should begin with identifying customers'

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needs and preferences through service quality attributes; this is also peculiar to seaport service quality and measurement.

It is important to note that there is noticeable increase in the number of air travel demand worldwide and Nigeria in particular, and this can be attributed to the global in nature of air transport, technological advancement, globalization, and other factors (Adeniran, 2017). As a result of this, taste of passengers differs and airport becoming global, also air travelers are becoming more experienced; it is therefore necessary that airport services are sufficient and quality.

This study is crucial because air transportation plays critical role in the economy of a nation; therefore failure or unreliability of air transport services can significantly influence the direct and indirect customers of airport. However, this study focused on comparing the quality of services offered in Murtala Muhammed International Airport 1 (MMA1) which is the public operated airport and international terminal, and Murtala Muhammed International Airport 2 (MMA2) and domestic terminal. Both airport terminals are located in Lagos state, Nigeria.

### Motivation for Study

The major difference between the two airport terminals is that MMA1 is an international airport terminal that is government managed and operated while the MMA2 is a domestic airport terminal that is privately managed and operated under concession strategy. Recently, the need to concession some airports in Nigeria arose and still under discuss. According to Jerome (2008); Oghojafor (2012); Adeniran and Gbadamosi (2017), The need for concessioning was borne out of the magnitude, scope and persistence of failure of Nigeria's Public Enterprises (PEs) including the airports which is quite alarming; as these enterprises required continuous massive subsidies, they seems to have delivered only intermittent and substandard services. The returns on these large investments were generally poor, and in some cases negative, with especially low rate of return relative to the large amount of resources invested in them. Jerome (2008) stated that net outflows from the government to the public enterprise sector were estimated at US\$2 billion annually, which is a huge amount.

The reasons for the poor performance of public enterprises in Nigeria including airports can be pointed to the fact that they tend to have uniform pattern and range from the presence of conflicting and interwoven roles determined by politicians, prevalence of uncompleted contracts and subsidies from government. This step up internal inefficiencies, issues of excessive bureaucratic controls, government interference and intervention, and other public service culture which tends to undermine and compromise the efficiency and optimum productivity (Jerome, 2008; Ogunsiji and Ogunsiji, 2010; Adeniran and Gbadamosi, 2017).

The Nigerian Airports and many other public corporations were also believed to have complex institutional management structure with stiff bureaucratic bottlenecks. For the purpose of addressing some immediate challenges such as airport delay, high charges, the Federal Minister of Aviation introduced airport concession to some of the airports in the country (Lagos, Kano, Abuja and Port-Harcourt), to facilitate needed expertise in the area of operations and technical knowhow (Adeniran and Gbadamosi, 2017).

In most develop countries like South Africa, Brazil, United States of America and others, governments and airport authorities have withdrawn from airport operations having the conception that enterprise-based airport services and operations would allow greater flexibility, effectiveness, efficiency, excellent services and customer satisfaction.

Quality is an important aspect of service industry, and it has been affirmed as fundamental for the survival of any organization when faced with competition, and to gain acceptance of the society together with achieving its mission (Natalisa and Subroto, 2003). Besides, air transport industry has played an important role in the global economy especially serving as a vital component in the tourism industry and remains essential to the conduct of international business (Tiernan, Rhoades, and Jr, 2008); which without airport terminal the industry as a system cannot function. There are various services rendered in the airport which will enhance the facilitation of transfer from land mode of transport to air mode of transport. It is essential that those services are assessed based on the expectation of airport passengers which can be referred to as quality of services and passengers' perception also referred to as customer satisfaction.

In-line with the above statements, many studies have been carried out regarding passengers' satisfaction and service quality in the air transport industry. Dale and Brian (2007) conducted a research on passengers' expectations of airport service quality with focus on New York Kennedy Airport and Liverpool's John Lennon Airport in the USA. The study made use of the following eight (8) airport service indicators; sign-post and functions, ambient conditions, signs and symbols, attitude, behaviors, expertise, productivity and leisure. The airport indicators might not sufficiently give accurate level of airport passengers' satisfaction and airport service quality, also the study was not conducted in Nigeria. The data was analyzed using both exploratory and confirmatory factor analysis (CFA). Also, Mattazo *et al.* (2012), studied passengers' satisfaction at the Augusto Severo Airport in Brazil. The work focused on five (5) key airport variables affecting satisfaction which are safety of the premises, waiting time for a taxi, availability and quality of seats in the airport, as well as prices of the food at terminal restaurants. The study also made use of few airport service indicators noted earlier which are limited in determining the level of airport passengers' satisfaction and airport service quality. The study was not carried out in Nigeria. Gap analysis was used to analyze the data.

Al Refaie *et al.* (2014) studied potential drivers of satisfaction and loyalty at the Jordan Airport. The study focused on three (3) different factors mainly on ticket pricing, reservation process and flight performance. The few airport service indicators earlier mentioned are not enough to give the accurately level of airport passengers' satisfaction and airport service quality. Gap analysis was used for data analysis. The study was not carried out in Nigeria. Also, Sung and Jin (2014) conducted a study on the importance and satisfaction of airport selection attributes by targeting Incheon International Airport and Gimpo International Airport in the metropolitan area of Korea. The study was limited to three (3) airport attributes: airport accessibility, airport facilities and spatiality. The listed airport attributes are not sufficient in determining the level of airport passengers' satisfaction and airport service quality. Gap analysis and importance-performance analysis was used to analyze the data. The study was not carried out in Nigeria.

Ben and Adebola (2014) conducted a research on the determinants of customers' satisfaction in the Nigerian Aviation Industry, using Analytic Hierarchical Process (AHP) model. The study was modeled on both airline and airport indicators. The focused airline services in their study are ticket and reservation, on-board services, ticket fees, flight schedule, speed on responding to request, information or reconfirmation, ticket purchase time limit, convenience of ticket purchase, convenience of flight schedule, courtesy and helpfulness staff, and information related to flight. The focused airport services in the study were

orderliness and cleanliness of check-in-area, speed of check-in process, information on flight status, boarding process, on-time departure and services at transit point, baggage handling services, and airport facilities and services. The sample size for the study is one hundred (100) but eighty-five (85) responses were valid. The airport services used in the study are limited in determining the efficiency of the airport, also the sample size of the study may be too small to give a plausible result. Analytic Hierarchical Process (AHP) model otherwise referred to as gap analysis was used for data analysis.

Thomas (2014) conducted a research on users' perceptions of service quality in Murtala Muhammed International Airport (MMIA), Lagos, Nigeria. The sample size for the study was obtained by using 0.1 percent of the passenger movement in year 2009 which may not be scientifically acceptable. The study focused on sixteen (16) airport indicators which are airport access, ticket purchasing, banking hall, places of convenience, bureau de change, car rental, post office, restaurants and bars, shopping malls, medical facilities, car parking, seat out, lounges, elevators, disabled assistant service, metal detector and scanner. The indicators earlier listed may not be sufficient to determine the level of airport passengers' satisfaction and service quality. Descriptive statistics was used for data analysis.

This study however used all the thirty-nine (39) SKYTRAX indicators which are the benchmark for services rendered by airport and blended into SERVQUAL attributes to compare the passengers' satisfaction of service quality in MMA1 and MMA2. This study helps to check if airport concessioning is best for Nigeria or not based on the result obtained when comparing the satisfaction level of passengers and quality services rendered in MMA1 and MMA2. It is believed that this approach is capable of providing more realistic result.

### Objectives of the Study

1. To compare the satisfaction level and quality of services in MMA1 and MMA2.
2. To examine the perception of passengers about the airport services.

### Research Hypothesis

H<sub>0</sub>: There is no relationship between customer satisfaction and airport service quality.

### Scope of the Study

This study is carried out in Murtala Muhammed International Airport, Lagos, Nigeria, considering the two passenger terminals of MMA1 and MMA2. The research is limited to international and domestic passengers in MMA1 and MMA2 because the airport terminals are the most patronized international and domestic airport terminals in Nigeria; also, all thirty-nine (39) SKYTRAX indicators were used to compare the satisfaction level of passengers and quality services rendered in MMA1 and MMA2.

## LITERATURE REVIEW

### Passengers' satisfaction

Passengers' satisfaction is derived largely from the quality and reliability of organizational products and services. In marketing, passengers' satisfaction is a measure of how products and services supplied by a company meet or surpass customers' expectation. In this connection, Kotler (1999) states categorically that passengers' satisfaction is the best indicator of a company's future profits. Hong (2006) points out that passengers' satisfaction is conceptualized as a cumulative construct that is affected by service expectations and

performance perceptions in any given period and is affected by past satisfaction from period to period.

### Service Quality

There is a universal approach to the definition of the concept of quality and its associated dimensions has never been a reality, even though the research agenda has existed for quite some time. Although quality is an exclusive concept, overwhelming studies exist on the subject of quality in the service industry with both concurring and conflicting views (Anderson and Sullivan, 1993; Bolton and Drew, 1991; Gupta and Zeithaml, 2006; Maarten *et al.* 2015; Rust *et al.* 1999; Van Doorn and Verhoef, 2008). Service quality is defined as a comparison between customer expectation and perception of service (Gronroos, 1984). According to Olsen and Johnson (2003), quality is consistently doing the right thing right. Service quality can be perceived as an evaluation of how efficiently a service delivered measures up to the expectations of consumers (Emmanuel and Solomon, 2015).

### Criticisms Regarding Service Quality

However, various scholars criticized the service quality (SERVQUAL) model despite its pervasive application. Cronin and Taylor (1992) proposed the SERVPERF model, which considers only actual performance and, thus, eliminates the expectation component present in the SERVQUAL model. Another common critique of the SERVQUAL model was that its dimensions lack dimensional stability (Carman, 1990), which is limited to applications in the five service industries (Parasuraman *et al.*, 1985, 1988).

Many researchers that questioned whether the SERVQUAL model can be applied to all service industries as a generic scale suggested that industry specific measurement determinants can be required to provide more accurate measurements (Babakus and Boller, 1992; Caro and Garcia, 2007; Ladhari, 2008; Van Dkyke *et al.*, 1997). In addition, the SERVQUAL model arguably neglects the service encounter outcome because it was designed to only address the service delivery process (Baker and Lam, 1993). Grönroos (1984) developed a model consisting of the three dimensions of technical quality, functional quality, and corporate image, which effectively consider the service outcome component when measuring the quality of a service. Technical quality describes how the customer obtains the service and functional quality describes the service achieved in the end, and corporate image influences the perception of quality in a positive, neutral, or negative manner.

Lehtinen and Lehtinen (1991) emphasized the importance of this attribute by proposing a model including the three dimensions of physical quality, interactive quality, and corporate quality. In the most recent literature, SERVQUAL has been pointed out as not being a universal tool to measure service quality in specific contexts, such as in B2B services (Benaziü and Došen (2012), corporate banking (Guo *et al.*, 2008), supply chains (Seth *et al.*, 2006), and others.

Further studies on various service industries that used the conceptualization and measurement instrument of SERVQUAL also indicated that it is not applicable for all industries or in all socio-cultural and economic environments. Indeed, some authors found that the dimensions of service quality indicated in SERVQUAL are either too many or too few for the specific context of their research.

## Relationship between Customer Satisfaction and Service Quality

Customer satisfaction is the sense that customers get when they experience service that fulfills or surpasses the expectation. Primarily in marketing, satisfaction is defined as the global evaluation of relationship fulfillment by a firm (Dwyer and Oh, 1987) or the positively affected state resulting from the assessment of a firm's working relationship (Farrelly and Quester, 2005; Gaski and Nevin, 1985). Satisfaction is also one of the most important elements to explain any type of relationship among participants (Sanzo *et al.*, 2003) and a consumer's fulfillment response (Oliver, 1997). Generally, customer satisfaction is known as an outcome of service quality, which means that it is related to the quality of the products or services provided to the customer in a positive manner.

Customer satisfaction is considered to be an intrinsic variable that explains returning customers and their post-behaviors of purchasing products and services (Oliver, 1980; Lee, 2000; Szymanski, and Henard, 2001). The level of customer satisfaction is believed to be enhanced, along with an increased level of perceived quality of the product or service. Numerous studies in many service sectors confirmed the positive relationship between service quality and customer satisfaction (Brady and Robertson, 2001; Cronin and Taylor, 1994; Parasuraman *et al.*, 1994) with some conflicting evidence (Rosen and Suprenant, 1998).

The relationship between customers' satisfaction and service quality has been established by SERVQUAL model. Service Quality which is abbreviated as SERVQUAL. The framework for measuring SERVQUAL is referred to as SERVQUAL model. SERVQUAL model is also referred to as Analytic Hierarchical Process (AHP), or Gap model. It defines quality as the difference between passengers' expectation and their perception of the service delivered. The model was developed by Parasuraman *et al.* (1985; 1988). SERVQUAL model is one of the initial and most commonly used tools to measure service quality (Parasuraman *et al.*, 1988) and consists of five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Gap model is used to examine the relationship between passengers' satisfaction and service quality.

Theoretical considerations provide the support for the arguments of Parasuraman *et al.* regarding the reliability and validity of SERVQUAL as an instrument to measure service quality (Parasuraman *et al.*, 1988). With respect to this, Caruana *et al.* (1995) reported that there is empirical support for the belief that delivery of service offering by a firm is related to its business performance. Although Rapert and Wren (1998) did prove cogently that quality initiatives improve performance.

During the last decades, the SERVQUAL model has been widely used in the measurement of service quality across various sectors, namely: banking (Lassar *et al.*, 2000), healthcare (Wong, 2002), the professional services (Philip and Hazlett, 2001), public transport (Aidoo *et al.*, 2013), airline (Sultan & Simpson, 2000), retail banking (Ravichandran, *et al.*, 2010; Ogunnaike and Olaleke, 2010) and internet (Eriksson and Friman, 2007). It was also applied in different countries such as United States (Kilbourne *et al.*, 2004), India (Randheer, *et al.*, 2011), Nigeria (Ali, 2012), China (Chung-Wei *et al.*, 2012), and Ghana (Aidoo *et al.*, 2013). The model was adopted in this study.

The constructs was used in the transportation sector, including aviation (Ugboma *et al.*, 2004; Anderson *et al.*, 2009; Adeniran, 2017), high-speed railways (Cao and Chen, 2011), and sea transport (Tongzon, 2001; Ugboma *et al.*, 2004), revealed a positive relationship between service quality and customer satisfaction. The wide array of application of such an instrument as SERVQUAL spells confidence in its utilization

as a technique for measuring service quality in various business sectors and service industries.

Originally, this model has ten (10) determinants of service quality comparing the customers' expectations and perception of services as a gap (Parasuraman, Zeithaml and Berry 1990). The determinants are; tangibles; reliability; responsiveness; competence; access; courtesy; communication; credibility; security; and understanding. According to Ravichandran *et al.* (2010) and Budiono (2009), these 10 dimensions were further regrouped in the well-known five (5) dimensions which are tangibles; reliability; responsiveness; assurance; and empathy. The five groups were adopted in this study.

## Benchmarking Airport Operational Performance

SKYTRAX uses a ranking system for its passengers' satisfaction surveys based on the following thirty-nine (39) product and service factors or indicators. All these indicators was adopted in this research. Gap model addresses the following five dimensions in order to measure airport service quality and passengers' satisfaction, a list of thirty-nine (39) airport service factors were determined in accordance to the model earlier discussed. It is therefore summarized in table 1. The table 1 can be further explained below;

**Tangibles:** These are the physical facilities and equipment available in the airport, the appearance of airport staff; how easy it is to understand communication materials.

**Reliability:** This is the ability of airport to perform the promised airport service dependably and accurately.

**Responsiveness:** This is the willingness of the airport employees to help airport passengers and providing a prompt service.

**Assurance:** This is the ability of airport employees to convey trust and confidence in the passengers, such as; competence to perform the service, politeness and respect for the passengers.

**Empathy:** This is the act by which the airport provides caring, individualized attention provided to airport customers.

## METHOD

### Research Design

This is a survey research which explores only primary data in comparing the passengers' satisfaction of service quality in MMA1 and MMA2. The target populations of this research study were international and domestic passengers in MMA1 and MMA2 respectively. For data analysis, the study is descriptive in nature and therefore adopts nonparametric test (Charles Spearman rank correlation) and Gap analysis. This is because the data types involved in the study are nominal and ordinal types.

### Sampling Techniques

This research is a survey research and the sampling technique is a purposive (non-probability) sampling. The sampling itself is an incidental sampling. This is appropriate for this study due to time limitation for respondents to fill out the questionnaire. Responses were collected from passengers of MMA1 and MMA2.

### Target Population and Sample Size

To determine the appropriate sample size for large (infinite) population and uncertain number of population, judgment was made about the confidence level and the maximum error allowance. The equation below was applied (Zikmund, 1999). Sample size for each terminal was determined.



**Table 1** Airport service quality

SERVQUAL Attributes	Airport Services (SKYTRAX Indicators)
RELIABILITY	Efficiency and affordable of public transport options. Taxi availability and prices. Immigration, queuing times and system for departure and arrivals. Prevent lost luggage services. Customer perception of airport security and safety standards. Ease of transit through the airport between flights for domestic and international travel. Baggage delivery times. Smoking policy and standard of smoking lounges. Standards of physically impaired facilities. Priority baggage delivery efficiency
ASSURANCE	Immigration staff attitude for departure and arrivals. Courtesy and attitude of security staff. Waiting times at security screening.
TANGIBLES	Getting to and from the airport, ease of access. Availability of luggage trolleys (airside and landside). Terminal comfort, ambiance, and general design and appearance. Seating facilities throughout terminals. Washroom and shower facilities in terminal. Television and entertainment facilities. Quiet areas, day rooms, hotel facility, rest areas. Children's play area and facilities provided. Check-in facilities, queuing systems, and seat availability. Location of airline lounges. Internet facilities and Wi-Fi availability. Business center facility. Telephone and fax locations. Bureau de change facilities. ATM facilities.
EMPHATY	Cleanliness of Terminal, floors, seating, and public areas. Flight information screens clarity and quality of information. Clarity of boarding calls and airport public announcements. Cleanliness of washroom facilities. Friendliness of airport staff. Terminal signage for facilities, boarding gates, transfer, and arrivals.
RESPONSIVENESS	Language skills for airport staff. Choice of shopping, tax free and other outlets. Prices charged in retail outlets. Prices charged in bars, cafes, and restaurants Choice of bars, cafes, and restaurants, including international options.

Source: Adeniran, 2017

**Table 2** Summary of data analysis for the objectives

Objectives	Questions to be raised	Method of analysis
To compare the satisfaction level and quality of services in MMA1 and MMA2.	Statements of airport services	Gap analysis
To examine the perception of passengers about the airport services.	Statement of airport services	Standard deviation

Source: Authors' Compilation (2018)

**Table 3** Summary of data analysis for the hypotheses

Hypotheses Statement	Variables	Method of Analysis
H <sub>0</sub> : There is no relationship between customer satisfaction and airport service quality	Customer satisfaction is dependent variable while airport service quality is independent variable	Charles Spearman's coefficient of correlation which is a non-parametric test

Source: Authors' Compilation (2018)

**Table 4** Response rate of questionnaire distribution

Questionnaires		Frequency	percent	Cumulative percent
Valid	Questionnaires returned	224	58.3	58.3
	Questionnaires not returned	160	41.7	100.0
	Total	384	100.0	

Source: Field Survey, 2017

$n = \frac{Z^2}{4E^2}$  where;  $n$  = Sample size;  $Z$  = Z score for the 95 percent level of confidence is 1.96

$E$  = Maximum acceptable error = 0.05

95 percent Confidence level at 0.05 maximum error was chosen because of the time consciousness of port customers.

When inserting the values into the sample size equation, it resulted in a sample size of 384 as shown below;

$$n = \frac{1.96^2}{4(0.05)^2} \quad n = \frac{3.84}{0.01} \quad n = 384$$

However, the researcher is needed to ensure that the return of the questionnaires were not be less than 384 in the two terminals.

### Method of Data Analysis

This study adopts descriptive statistical analysis which provides insight into the potentials of the data gathered. Descriptive tools was adopted in the form of bar charts, weighted means, standard deviations, cross-tabulations. The descriptive statistical analysis involved the use of nonparametric test (Charles Spearman rank correlation) because the data types involved in the study are nominal and ordinal types, also the sampling technique is non-probabilistic in nature (Adeniran, 2017). Table 2 summarizes the data analysis of the objectives, while table 3 summarizes the data analysis of the hypotheses.

### Gap analysis

Gap analysis is used to compare the expectations and perceptions of quality services. The assumption of Gap analysis is that when the Expected Service (ES) is greater than the Perceived Service (PS), quality will be perceived as being less and less than satisfactory, the greater the difference between ES and PS is. When Expected Service (ES) is equal to the Perceived Service, the quality is satisfactory, also when Expected Service (ES) is less than the Perceived Service  $ES < PS$ , quality will be more and more satisfactory as the difference between PS and ES grows (Thomas *et al.*, 2014).

### Mean and Standard Deviation

The researcher calculated the mean and standard deviation of respondents' satisfaction level. These descriptive statistics help define the satisfaction level of the sample of airport passengers in various terminals towards the services and allow hypothesis testing.

The following models were employed to find the interval or range;

$$\text{Interval} = \frac{\text{Maximum interval} - \text{Minimum interval}}{\text{Number of range}}$$

$$\text{Interval} = \frac{5 - 1}{5}$$

$$\text{Interval} = 0.8.$$

Each interval is equal to 0.8 for each different variable, the level of satisfaction and the level of service quality that respondents ranked were between the intervals which is translated as follows:

Rating Range Translation

- 4.20 – 5.00: Passenger is strongly satisfied.
- 3.40 – 4.19: Passenger is satisfied.
- 2.60 – 3.39: Passenger is neither satisfied nor dissatisfied.
- 1.80 – 2.59: Passenger is dissatisfied.
- 1.00 – 1.79 Passenger is highly dissatisfied.

Also,

- 4.20 – 5.00: Quality of airport service is excellent.
- 3.40 – 4.19: Quality of airport service is very good.
- 2.60 – 3.39: Quality of airport service is good.
- 1.80 – 2.59: Quality of airport service is fair.
- 1.00 – 1.79 Quality of airport service is poor.

Standard deviation is a more useful statistic than simply knowing the range of scores, this would be to see how widely dispersed different scores are from the mean. The higher the standard deviation, the wider the distribution of the scores is around the mean. This indicates a more heterogeneous or dissimilar spread of scores (points) around the mean. On the other way round, a lower value of the standard deviation indicates a narrower distribution or more similar or homogenous scores around the mean.

The implication of having standard deviations more than 0.8 is that passengers felt differently about the airport services. On the other side, the implication of having standard deviations lower than 0.8 is that passengers felt the same about the airport services (Adeniran, 2017).

### Response Rate of Respondents

The study sought to gather information from airport passengers. Table 4 shows that a total of three hundred and eighty four (384) questionnaires were distributed to passengers in MMA1 and MMA2 terminals, and 224 questionnaires were collected having been filled completely. According to Mugenda and Mugenda (2003), a response rate of 50 percent is adequate for data analysis and reporting; a rate of 60 percent is good and a response rate of 70 percent and over is excellent. Hence, 58.3 percent response rate for this study was very good for data analysis and reporting. From Table 5, it showed that out of the retrieved questionnaires of two hundred and twenty-four (224), 49.1 percent valid questionnaire response were obtained from international terminal while 50.9 percent valid questionnaire response were obtained from the domestic terminal.

## RESULTS AND DISCUSSION OF FINDINGS

### Comparative Analysis of Passengers' Satisfaction in MMA1 and MMA2

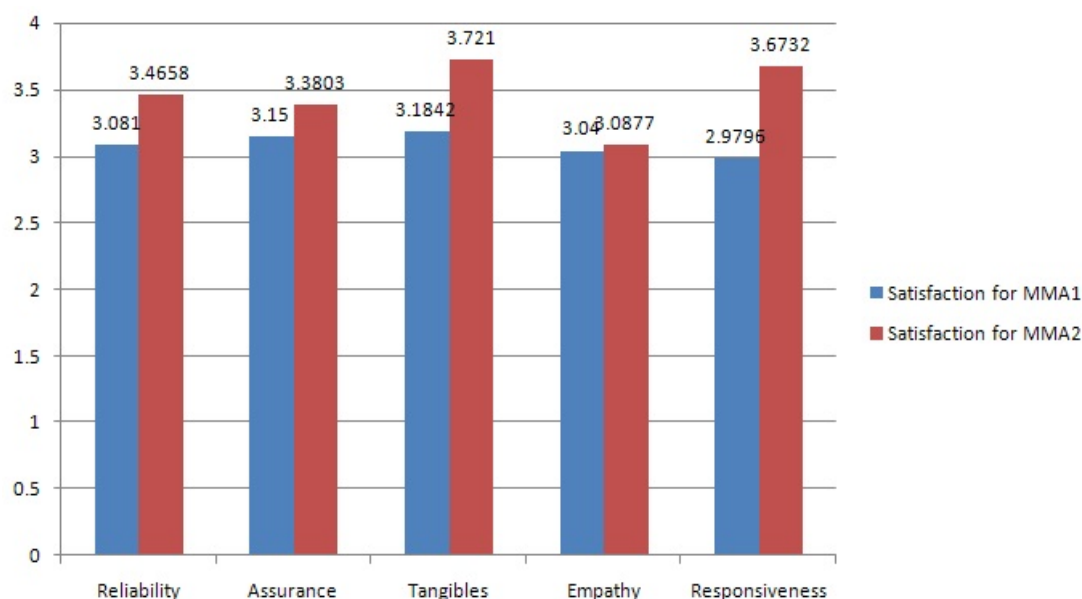
Comparing overall aspects of passengers' satisfaction in MMA1 and MMA2, based on each service quality attributes in table 6, the least average mean scores for MMA1 was Responsiveness at 2.9796 while MMA2 was 3.6732, Empathy at 3.0400 while MMA2 was 3.8877 which seems to be the highest mean score, Reliability at 3.0810 while MMA2 was 3.4658 which was the least mean score, Assurance at 3.1500 while MMA2 was 3.4803, and Tangibles at 3.1842 while MMA2 was 3.7210.

The least satisfaction in Reliability was standard of physically impaired facilities at 2.2909 for MMA1 and also 2.2719 for MMA2; in Assurance was Immigration staff attitude at 2.8273 in MMA1 and at 3.2368 in MMA2; in Tangibles were washroom and shower facilities at 2.9000 and television and entertainment facilities at 2.9545 in MMA1 respectively while the two were considered as highest rating at 4.2807 and 4.3684 respectively in MMA2, although the least rating in MMA2 were Bureau de change facility and ATM facility at 3.2368 and 3.2105 respectively; in Empathy was the cleanliness of washroom facilities at

**Table 5** Responses in Airport terminal

		Frequency	percent	Cumulative percent
Valid	MMA1	110	49.1	49.1
	MMA2	114	50.9	100.0
Total		224	100.0	

Source: Field Survey, 2017



**Figure 1** Bar chart depicting the descriptive comparison of passengers' satisfaction in terms of airport services in MMA1 and MMA2 based on the overall SERVQUAL attributes

Source: Field Survey, 2017

2.9364 and terminal signage facilities, boarding gates, transfer and arrivals at 2.9455 in MMA1 while they were well taken care of in MMA2; and in Responsiveness was the language skills for airport staff at 2.9364 the choice of shopping, tax free and other outlets at 2.9000 in MMA1 while they were the highest rating in MMA2 as visually shown in figure 1.

From entire service quality attributes as shown in figure 6, passengers of MMA2 were more satisfied than the passengers in MMA1. The implication is that the airport services provided in MMA2 is better than the airport services provided in MMA1.

From the airport services in Reliability attribute, passengers of MMA2 were more satisfied than the passengers in MMA1. Passengers felt satisfied with the ease of transit through the two airport terminals while they were dissatisfied with the standard of physically impaired facilities in the two terminals. The implication is that the ease of transit through the airport and physically impaired facilities is significant for passenger usage. The satisfaction level of passengers on the efficiency of available public transport options, taxi availability and pricing, in the two terminals are almost the same. This might be as a result of the fact that the two terminals are located in the same city.

From the airport services in Assurance attribute, passengers of MMA2 were more satisfied than the passengers in MMA1. The satisfaction level of passengers on the friendliness of airport staff in the two terminals are almost the same. This seems to be as a result of commonality in the attitude, psychology and orientation or perspective of Nigerian airport staff.

From the airport services in Tangibles attribute, passengers of MMA2 were more satisfied than the passengers in MMA1. The satisfaction levels of passengers on the availability of luggage trolleys is quite the same in the two terminals, while the situation of washroom and shower facilities, television and entertainment facilities in MMA2 is far better than in MMA1.

From the airport services in Empathy attribute, passengers of MMA2 were more satisfied than the passengers in MMA1. The satisfaction levels of passengers on cleanliness of terminal floor, seating and public area, flight information, screen clarity and quality information, clarity of boarding calls and airport public announcement, cleanliness of washroom facilities, and terminal signage, boarding gates, transfer and arrivals in MMA2 were far better than those offered in MMA1.

From the airport services in Responsiveness attribute, passengers of MMA2 were more satisfied than the passengers in MMA1. The satisfaction levels of passengers on language skills for airport staff, choice of shopping, tax free and other outlets, prices charged in retail outlets, and choice of bars, cafes and restaurants including international options in MMA2 are better than those offered in MMA1.

### Comparative Analysis of Service Quality in MMA1 and MMA2

Comparing overall aspects of quality service in MMA1 and MMA2, based on each service quality attributes as shown in table 7, the least average mean scores for MMA1 was Reliability at 2.9818 while MMA2 was 3.4650, Responsiveness at 3.0091 while MMA2 was 3.6776, Empathy at 3.0509 while MMA2 was 3.8614 which was the highest

**Table 6** Comparative analysis of passengers' satisfaction level in MMA1 and MMA2

Servqual Attributes	Airport services	Weighted Mean MMA1	Satisfaction Level for MMA1	Rank	Weighted Mean MMA2	Satisfaction Level for MMA2	Rank
Reliability							
	Efficiency of available public transport options	3.4273	Satisfied	4	3.5175	Satisfied	22
	Taxi availability and prices	3.3455	Neither satisfied nor dissatisfied	6	3.4474	Satisfied	23
	Immigration and queuing times	3.3909	Neither satisfied nor dissatisfied	5	3.6140	Satisfied	17
	Prevent lost luggage services	3.0000	Neither satisfied nor dissatisfied	23	3.8246	Satisfied	13
	Security and safety standards	2.7455	Neither satisfied nor dissatisfied	30	3.5351	Satisfied	20
	Ease of transit through the airport	3.5364	Satisfied	3	4.1579	Satisfied	5
	Baggage delivery times	3.0273	Neither satisfied nor dissatisfied	22	3.3509	Neither satisfied nor dissatisfied	26
	Smoking policy and standard of smoking lounges	3.0727	Neither satisfied nor dissatisfied	19	3.5877	Satisfied	18
	Standard of physically impaired facilities	2.2909	Dissatisfied	31	2.2719	Dissatisfied	33
	Priority baggage delivery efficiency	2.9727	Neither satisfied nor dissatisfied	24	3.3509	Neither satisfied nor dissatisfied	26
N= 10	<b>Average rating overall</b>	<b>3.0810</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.4658</b>	<b>Satisfied</b>	
Assurance							
	Immigration staff attitude	2.8273	Neither satisfied nor dissatisfied	29	3.2368	Neither satisfied nor dissatisfied	31
	Courtesy and attitude of security staff	2.9364	Neither satisfied nor dissatisfied	27	3.2456	Neither satisfied nor dissatisfied	30
	Waiting times at security screening	3.1091	Neither satisfied nor dissatisfied	16	3.6754	Satisfied	16
	Friendliness of airport staff	3.7273	Satisfied	2	3.7632	Satisfied	15
N= 4	<b>Average rating overall</b>	<b>3.1500</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.4803</b>	<b>Satisfied</b>	
Tangibles							
	Getting to and fro airport with ease	3.2545	Neither satisfied nor dissatisfied	7	3.5789	Satisfied	19
	Availability of luggage trolleys	3.7727	Satisfied	1	3.7719	Satisfied	14
	Terminal comfort, ambiance, general designs and appearance	3.1273	Neither satisfied nor dissatisfied	14	4.1316	Satisfied	6
	Seating facilities throughout terminal	3.2000	Neither satisfied nor dissatisfied	10	3.9561	Satisfied	7
	Washroom and shower facilities	2.9000	Neither satisfied nor dissatisfied	28	4.2807	Strongly satisfied	2
	Television and entertainment facilities	2.9545	Neither satisfied nor dissatisfied	25	4.3684	Strongly satisfied	1
	Quiet areas, day rooms, rest area, hotel facilities	3.2273	Neither satisfied nor dissatisfied	8	4.1667	Satisfied	4
	Children play area facilities	3.2091	Neither satisfied nor dissatisfied	9	4.1842	Satisfied	3



	Check-in, and queuing facilities	3.1818	Neither satisfied nor dissatisfied	11	3.4211	Satisfied	25
	Location of airline lounges	3.1818	Neither satisfied nor dissatisfied	11	3.5263	Satisfied	21
	Internet facilities and WIFI availability	3.1727	Neither satisfied nor dissatisfied	12	3.3333	Neither satisfied nor dissatisfied	28
	Business center facility	3.1182	Neither satisfied nor dissatisfied	15	3.3421	Neither satisfied nor dissatisfied	27
	Telephone and fax location	3.1091	Neither satisfied nor dissatisfied	16	3.3070	Neither satisfied nor dissatisfied	29
	Bureau de change facility	3.1818	Neither satisfied nor dissatisfied	11	3.2368	Neither satisfied nor dissatisfied	31
	ATM facility	3.1727	Neither satisfied nor dissatisfied	12	3.2105	Neither satisfied nor dissatisfied	32
N= 15	<b>Average rating overall</b>	<b>3.1842</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.7210</b>	<b>Satisfied</b>	
<b>Empathy</b>							
	Cleanliness of terminal, floor, seating and public area	3.0818	Neither satisfied nor dissatisfied	18	3.8509	Satisfied	11
	Flight information, screen clarity and quality of information	3.1364	Neither satisfied nor dissatisfied	13	3.9386	Satisfied	8
	Clarity of boarding calls, and airport public announcement	3.1000	Neither satisfied nor dissatisfied	17	3.9561	Satisfied	7
	Cleanliness of washroom facilities	2.9364	Neither satisfied nor dissatisfied	27	3.8246	Satisfied	13
	Terminal signage facilities, boarding gates, transfer and arrivals	2.9455	Neither satisfied nor dissatisfied	26	3.8684	Satisfied	10
N= 5	<b>Average rating overall</b>	<b>3.0400</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.8877</b>	<b>Satisfied</b>	
<b>Responsiveness</b>							
	Language skills for airport staff	2.9364	Satisfied		3.9035	Satisfied	9
	Choice of shopping, tax free and other outlets	2.9000	Neither satisfied nor dissatisfied		3.8333	Satisfied	12
	Prices charged in retail outlets	3.0455	Neither satisfied nor dissatisfied	20	3.5175	Satisfied	22
	Choice of bars, cafes and restaurants, including international options	3.0364	Neither satisfied nor dissatisfied	21	3.4386	Satisfied	24
N= 4	<b>Average rating overall</b>	<b>2.9796</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.6732</b>	<b>Satisfied</b>	
<b>General</b>	<b>Average overall</b>	<b>3.0870</b>	<b>Neither satisfied nor dissatisfied</b>		<b>3.6456</b>	<b>Satisfied</b>	

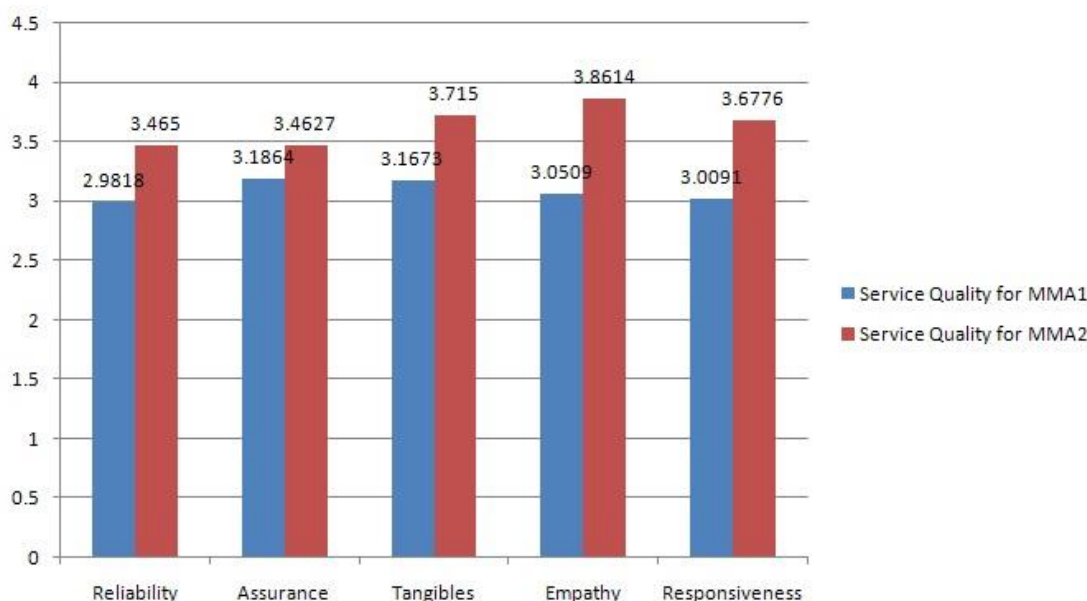
Source: Field Survey, 2017

**Table 7** Comparative analysis of quality service in MMA1 and MMA2

Servqual Attributes	Airport services	Weighted Mean (MMA1)	Service Quality (MMA1)	Rank (MMA1)	Weighted Mean (MMA2)	Service Quality MMA2	Rank (MMA2)
<b>Reliability</b>							
	Efficiency of available public transport options	2.6909	Good	29	3.3333	Good	26
	Taxi availability and prices	3.3455	Good	5	3.5702	Very good	18
	Immigration and queuing times	3.3909	Very good	4	3.9035	Very good	8
	Prevent lost luggage services	2.9727	Good	21	3.6579	Very good	16

	Security and safety standards	2.7273	Good	28	3.4298	Very good	22
	Ease of transit through the airport	3.5455	Very good	3	4.2281	Excellent	3
	Baggage delivery times	2.9364	Good	24	3.4211	Very good	23
	Smoking policy and standard of smoking lounges	3.0636	Good	17	3.4123	Very good	24
	Standard of physically impaired facilities	2.2455	Fair	30	2.6667	Good	33
	Priority baggage delivery efficiency	2.9000	Good	25	3.0263	Good	32
N= 10	<b>Average rating overall</b>	<b>2.9818</b>	<b>Good</b>		<b>3.4650</b>	<b>Very good</b>	
Assurance							
	Immigration staff attitude	2.8182	Good	27	3.1667	Good	31
	Courtesy and attitude of security staff	3.1909	Good	10	3.2456	Good	28
	Waiting times at security screening	3.1000	Good	15	3.6754	Very good	15
	Friendliness of airport staff	3.6364	Very good	1	3.7632	Very good	14
N= 4	<b>Average rating overall</b>	<b>3.1864</b>	<b>Good</b>		<b>3.4627</b>	<b>Very good</b>	
Tangibles							
	Getting to and fro airport with ease	2.8636	Good	26	3.5789	Very good	17
	Availability of luggage trolleys	3.6000	Very good	2	3.7719	Very good	13
	Terminal comfort, ambiance, general designs and appearance	3.0818	Good	16	4.1316	Very good	6
	Seating facilities throughout terminal	3.2818	Good	6	3.9561	Very good	7
	Washroom and shower facilities	2.8636	Good	26	4.2807	Excellent	2
	Television and entertainment facilities	3.0818	Good	16	4.3684	Excellent	1
	Quiet areas, day rooms, rest area, hotel facilities	3.2727	Good	7	4.1667	Excellent	5
	Children play area facilities	3.2636	Good	8	4.1842	Excellent	4
	Check-in, and queuing facilities	3.1909	Good	10	3.4211	Very good	23
	Location of airline lounges	3.1364	Good	13	3.5263	Very good	19
	Internet facilities and WIFI availability	3.2364	Good	9	3.3333	Good	26
	Business center facility	3.1909	Good	10	3.3421	Good	25
	Telephone and fax location	3.1273	Good	14	3.3070	Good	27
	Bureau de change facility	3.1455	Good	12	3.2368	Good	29
	ATM facility	3.1727	Good	11	3.2105	Good	30
N= 15	<b>Average rating overall</b>	<b>3.1673</b>	<b>Good</b>		<b>3.7150</b>	<b>Very good</b>	
Empathy							
	Cleanliness of terminal, floor, seating and public area	3.0636	Good	17	3.8509	Very good	10
	Flight information, screen clarity and quality of information	3.1455	Good	12	3.9386	Very good	8
	Clarity of boarding calls, and airport public announcement	3.0818	Good	16	3.8509	Very good	10
	Cleanliness of washroom facilities	2.9636	Good	22	3.8246	Very good	12
	Terminal signage facilities, boarding gates, transfer and arrivals	3.0000	Good	20	3.8421	Very good	11
N= 5	<b>Average rating overall</b>	<b>3.0509</b>	<b>Good</b>		<b>3.8614</b>	<b>Very good</b>	
Responsiveness							
	Language skills for airport staff	3.0091	Good	19	3.9035	Very good	9
	Choice of shopping, tax free and other outlets	2.9455	Good	23	3.8509	Very good	10
	Prices charged in retail outlets	3.0636	Good	17	3.5175	Very good	20
	Choice of bars, cafes and restaurants, including international options	3.0182	Good	18	3.4386	Very good	21
N= 4	<b>Average rating overall</b>	<b>3.0091</b>	<b>Good</b>		<b>3.6776</b>	<b>Very good</b>	
<b>GENERAL</b>	<b>Average overall</b>	<b>3.0791</b>	<b>Good</b>		<b>3.6363</b>	<b>Very good</b>	

Source: Field Survey, 2017



**Figure 2** Bar chart depicting the descriptive comparison of quality services in MMA1 and MMA2 based on SERVQUAL attributes  
Source: Field Survey, 2017

mean score, Tangibles at 3.1673 while MMA2 was 3.7150, and Assurance at 3.1864 while MMA2 was 3.4627.

The least satisfaction in Reliability was standard of physically impaired facilities in both MMA1 and MMA2 at 2.2455 and 2.6667 respectively; in Assurance was Immigration staff attitude in both MMA1 and MMA2 at 2.8182 and 3.1667 respectively; in Tangibles were getting to and fro airport with ease at 2.8636 in MMA1 and ATM facility at 3.2105 in MMA2; in Empathy was cleanliness of washroom facilities in both MMA1 and MMA2 at 2.9636 and 3.8246 respectively; in responsiveness was choice of shopping, tax free and other outlets at 2.9455 in MMA1 and Choice of bars, cafes and restaurants, including international options at 3.4386 in MMA2.

Also, the highest service quality in Reliability was Ease of transit through the airport in both MMA1 and MMA2 at 3.5455 and 4.2281 respectively; in Assurance was Friendliness of airport staff in both MMA1 and MMA2 at 3.6364 and 3.7632 respectively; in Tangibles was Availability of luggage trolleys in MMA1 at 3.6000 and in MMA2 was Washroom and shower facilities at 4.2807, and Television and entertainment facilities at 4.3684; in Empathy was Flight information, screen clarity and quality of information in both MMA1 and MMA2 at 3.1455 and 3.9386 respectively; and in Responsiveness was Prices charged in retail outlets at 3.0636 in MMA1 and Language skills for airport staff at 3.9035 in MMA2 as visually shown in the figure 2.

From entire service quality attributes, passengers rated that the services provided in MMA2 are more quality than the services provided in MMA1. The implication is that the passengers in MMA2 will be more satisfied with the airport services than the passengers in MMA1.

From the airport services in Reliability attribute, as rated by passengers, the services in MMA2 is more quality than the service quality in MMA1. Ease of transit through the two airport terminals are of good quality, while the standard of physically impaired facilities in the two terminals fair. The implication is that the ease of transit through the airport and physically impaired facilities is significant for passengers' usage.

From the airport services in Assurance attribute, as rated by passengers, the services of MMA2 is more quality than the services in

MMA1. The waiting times at security screening in MMA2 is less and very good when compared with MMA1, this can be attributed to the installation of computerized devices in MMA2. The friendliness of airport staff in MMA1 and MMA2 is very good. This seems to be as a result of commonality in the attitude, psychology and orientation or perspective of Nigerian airport staff.

From the airport services in Tangibles attribute, as rated by passengers, the services of MMA2 is more quality than the services in MMA1. The availability of luggage trolleys is very good in the two terminals. The provision of television and entertainment facilities, quiet areas, day rooms, rest areas, hotel facilities, and children play area facilities, and washroom and shower facilities in MMA2 are excellent while they are good in MMA1. The management of MMA2 seems to entertain their passengers in a very clean environment than the management of MMA1.

From the airport services in Empathy attribute, as rated by passengers, the services of MMA2 is more quality than the services in MMA1. The cleanliness of terminal floor, seating and public area, flight information, screen clarity and quality information, clarity of boarding calls and airport public announcement, cleanliness of washroom facilities, and terminal signage, boarding gates, transfer and arrivals in MMA2 are very good and better than those offered in MMA1. This result is in-line with the recent statement that MMA2 is the second cleanest facility in Lagos.

From the airport services in Responsiveness attribute, as rated by passengers, the services of MMA2 is more quality than the services in MMA1. The quality of language skills for airport staff, choice of shopping, tax free and other outlets, prices charged in retail outlets, and choice of bars, cafes and restaurants including international options in MMA2 is very good than those offered in MMA1.

The result of Gap analysis was revealed in Table 8, it shows the overall comparison between the satisfaction level of passengers in MMA1 and MMA2 based on the quality of airport services rendered. Based on the service quality attributes, the respondents in MMA1 were satisfied with reliability attribute and tangibles attribute, while the respondents in MMA2 were satisfied with reliability attribute. It is

**Table 8** Gap analysis of the attributes

SERVQUAL ATTRIBUTES	PERCEIVED SERVICE (MMA1)	PERCEIVED SERVICE (MMA2)	EXPECTED SERVICE (MMA1)	EXPECTED SERVICE (MMA2)	Gap Analysis (PS-ES) MMA1	Gap Analysis (PS-ES) MMA2
Reliability	3.081	3.466	2.981	3.465	0.1	0.001
Assurance	3.15	3.38	3.186	3.463	-0.036	-0.083
Tangibles	3.184	3.701	3.167	3.715	0.017	-0.014
Empathy	3.04	3.087	3.05	3.861	-0.01	-0.774
Responsiveness	2.976	3.673	3.009	3.678	-0.033	-0.005

**Table 9** Charles Spearman's Rank correlation showing the relationship between passenger's satisfaction and service quality

Passengers' Satisfaction Dependent Variables	Service quality Independent Variables	Correlation Value ( $r^1$ )	Sig.Level (P. Value)	Remarks or Decision at 0.05
Efficiency of available public transport options	Efficiency of available public transport options	0.139	0.03	Reject
Taxi availability and prices	Taxi availability and prices	0.622	0.00	Reject
Immigration and queuing times	Immigration and queuing times	0.628	0.00	Reject
Prevent lost luggage services	Prevent lost luggage services	0.552	0.00	Reject
Security and safety standards	Security and safety standards	0.711	0.00	Reject
Ease of transit through the airport	Ease of transit through the airport	0.702	0.00	Reject
Baggage delivery times	Baggage delivery times	0.611	0.00	Reject
Smoking policy and standard of smoking lounges	Smoking policy and standard of smoking lounges	0.559	0.00	Reject
Standard of physically impaired facilities	Standard of physically impaired facilities	0.401	0.00	Reject
Priority baggage delivery efficiency	Priority baggage delivery efficiency	0.748	0.00	Reject
Immigration staff attitude	Immigration staff attitude	0.857	0.00	Reject
Courtesy and attitude of security staff	Courtesy and attitude of security staff	0.866	0.00	Reject
Waiting times at security screening	Waiting times at security screening	0.933	0.00	Reject
Friendliness of airport staff	Friendliness of airport staff	0.876	0.00	Reject
Getting to and fro airport with ease	Getting to and fro airport with ease	0.801	0.00	Reject
Availability of luggage trolleys	Availability of luggage trolleys	0.852	0.00	Reject
Terminal comfort, ambiance, general designs and appearance	Terminal comfort, ambiance, general designs and appearance	0.950	0.00	Reject
Seating facilities throughout terminal	Seating facilities throughout terminal	0.879	0.00	Reject
Washroom and shower facilities	Washroom and shower facilities	0.934	0.00	Reject
Television and entertainment facilities	Television and entertainment facilities	0.907	0.00	Reject
Quiet areas, day rooms, rest area, hotel facilities	Quiet areas, day rooms, rest area, hotel facilities	0.897	0.00	Reject
Children play area facilities	Children play area facilities	0.871	0.00	Reject
Check-in, and queuing facilities	Check-in, and queuing facilities	0.841	0.00	Reject
Location of airline lounges	Location of airline lounges	0.874	0.00	Reject
Internet facilities and WIFI availability	Internet facilities and WIFI availability	0.856	0.00	Reject
Business center facility	Business center facility	0.835	0.00	Reject
Telephone and fax location	Telephone and fax location	0.931	0.00	Reject
Bureau de change facility	Bureau de change facility	0.901	0.00	Reject
ATM facility	ATM facility	0.906	0.00	Reject
Cleanliness of terminal, floor, seating and public area	Cleanliness of terminal, floor, seating and public area	0.940	0.00	Reject
Flight information, screen clarity and quality of information	Flight information, screen clarity and quality of information	0.911	0.00	Reject
Clarity of boarding calls, and airport public announcement	Clarity of boarding calls, and airport public announcement	0.485	0.00	Reject
Cleanliness of washroom facilities	Cleanliness of washroom facilities	0.460	0.00	Reject
Terminal signage facilities, boarding gates, transfer and arrivals	Terminal signage facilities, boarding gates, transfer and arrivals	0.666	0.00	Reject
Language skills for airport staff	Language skills for airport staff	0.730	0.00	Reject
Choice of shopping, tax free and other outlets	Choice of shopping, tax free and other outlets	0.678	0.00	Reject
Prices charged in retail	Prices charged in retail	0.924	0.00	Reject
Choice of bars, cafes and restaurants, including international options	Choice of bars, cafes and restaurants, including international options	0.822	0.00	Reject

Source: Field Survey, 2017

important to note that the expectation of respondents in MMA2 is quite more than the expectation of respondents in MMA1. It was earlier stated

that reliability attribute is the ability of airport to perform the promised airport service dependably and accurately. Tangibles attribute are the

physical facilities and equipment available in the airport, the appearance of airport staff; how easy it is to understand communication materials.

### Test of Hypothesis

The null hypothesis states that there is no relationship between passengers' satisfaction and airport service quality. Passengers' satisfaction is the dependent variable while the airport service quality is the independent variable. The chosen significance level is 0.05; hence the confidence level is 0.95. The computed test statistics was calculated with nonparametric test (Charles Spearman's rank correlation), (Table 9).

For all dimensions of passengers' satisfaction and quality service, the significance level (P.Value) of the computed test statistics is less than 0.05. This is a strong numerical evidence to reject the Null Hypothesis and affirm the Alternate Hypothesis. It can be concluded therefore that the assumption which states that there is no relationship between passengers' satisfaction and quality service is rejected and affirm that there is relationship between passengers' satisfaction and quality service.

The correlation value of about 71.1 percent of all service dimensions resulted to a positive and very strong correlation which ranges from 0.70 to 0.94, while about 18.4 percent of all service dimensions give a positive and strong correlation which ranges from 0.50 to 0.68, also about 7.9 percent of all service dimensions gives a positive and weak correlation which ranges from 0.40 to 0.49, and about 2.6 percent of all service dimensions give a positive and very weak correlation which is 0.139.

### Summary

The sample size for the study is a total of three hundred and eighty four (384), meanwhile 224 (58.3 percent) of response rate was valid for data analysis. 49.1 percent valid questionnaire responses were obtained from international terminal while 50.9 percent valid questionnaire responses were obtained from the domestic terminal.

When comparing overall aspects of passengers' satisfaction in MMA1 and MMA2, the lowest level of satisfaction in MMA1 was Responsiveness and Empathy, while in MMA2 was Reliability and Assurance. The highest level of satisfaction in MMA1 was Tangibles and Assurance, while in MMA2 were Empathy and Tangibles. This signifies that the lowest or highest satisfaction level in MMA1 is quite different from the lowest or highest satisfaction level in MMA2. Based on the airport services, the least satisfaction in MMA1 were standard of physically impaired facilities, safety and security standard, and Immigration staff attitude, while in MMA2 were standard of disabled or physically impaired access facilities, ATM facilities, bureau de change facilities, and immigration staff attitude.

In addition, based on airport services, the highest level satisfaction in MMA1 were availability of luggage trolleys, friendliness of airport staff, and ease of transit through the airport, while in MMA2 were television and entertainment facilities, washroom and shower facilities, and children's play area facilities.

The least service quality in Reliability was standard of physically impaired facilities in both MMA1 and MMA2; in Assurance was Immigration staff attitude in both MMA1 and MMA2; in Tangibles were Getting to and fro airport with ease in MMA1 and ATM facility in MMA2; in Empathy was Cleanliness of washroom facilities in both MMA1 and MMA2; in responsiveness was Choice of shopping, tax free and other outlets in MMA1 and Choice of bars, cafes and restaurants, including international options in MMA2.

Also, the highest service quality in Reliability was Ease of transit through the airport in both MMA1 and MMA2; in Assurance was Friendliness of airport staff in both MMA1 and MMA2; in Tangibles was Availability of luggage trolleys in MMA1 and in MMA2 was Washroom and shower facilities, and Television and entertainment facilities; in Empathy was Flight information, screen clarity and quality of information in both MMA1 and MMA2; and in Responsiveness was Prices charged in retail outlets in MMA1 and Language skills for airport staff in MMA2.

From correlation analysis, about 71.1 percent of all service dimensions give a positive and very strong correlation, while about 18.4 percent of all service dimensions give a positive and strong correlation, also about 7.9 percent of all service dimensions give a positive and weak correlation, and about 2.6 percent of all service dimensions give a positive and very weak correlation. Efficiency of available public transport options is the only service with a very weak correlation. This signifies that the availability of public transport options is not efficient to satisfy the passengers. Efficiency of available transport options has to do with right transport mode at the right time in the right condition with right management. This call for improving the options of public transport by developing various transport modes interconnected or integrated in the airport location. The fact that majority of the service dimensions gives positive correlation between the passengers' satisfaction and service quality signifies that the changes in both variables take place in the same direction.

### CONCLUSION AND RECOMMENDATIONS

The study is aimed at comparing the satisfaction level of service quality in MMA1 with MMA2. It was revealed that respondents are satisfied with the service quality provided in MMA2 than the service quality provided in MMA1. Airport passengers felt dissimilar (heterogeneous) about the services (products) offered. This heterogeneous perception can be traceable to be one of the unique characteristics of air transport service which is in line with the view of John (2007). Also, there is a relationship between passengers' satisfaction and service quality. Hence, service quality leads to passengers' satisfaction. Finally, the airport services in MMA2 are more quality than airport services in MMA1. Hence, airport concessioning is therefore recommended to enhance quality of airport services and customers' satisfaction. Finally, the fact that service quality provided in MMA2 is quite better than that of MMA1 can be traceable to the concession operation strategy of MMA2. It is therefore recommended that airport concessioning which is a good strategy to enhancing efficiency of airport operations and management should be adopted in Nigeria.

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